

REMARKS

Claims 1-7 and 13-18 are pending in this application. By this Amendment, claims 1, 4, 7 and 13 are amended and claims 19-22 are canceled without prejudice or disclaimer. Various amendments are made for clarity and are unrelated to issues of patentability.

Entry of the amendments is proper under 37 C.F.R. §1.116 because the amendments: (1) place the application in condition for allowance; (2) do not raise any new issues requiring further search and/or consideration; and/or (3) place the application in better form for appeal, should an appeal be necessary. More specifically, independent claim 1 is amended to include features of dependent claims 19-20 and independent claim 4 is amended to include features of dependent claims 21-22. Thus, no new issues are raised. Entry is thus proper under 37 C.F.R. §1.116.

The Office Action rejects claims 1-7 and 13-20 under 35 U.S.C. §103(a) over Applicants Admitted Prior Art (hereafter AAPA) in view of U.S. Patent 5,876,536 to Kumar. The Office Action also rejects claims 4-7 and 21-22 under 35 U.S.C. §102(a) by AAPA. The rejections are respectfully traversed with respect to the pending claims.

Independent claim 1 recites a multi-chip module in which a plurality of control chips having a control circuit for controlling the PDP, and a plurality of memories are mounted on a single package, wherein the multi-chip module is mounted on a printed circuit board (PCB) of a control board, and wherein the multi-chip module includes a plurality of green tapes, and input/output (I/O) lines coupling the plurality of control chips and the plurality of memories are formed in the plurality of green tapes within the single package.

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In one non-limiting example, the present specification describes that a plurality of system control chips and a plurality of memories are mounted on a single package during their fabrication process. After that, the single package is mounted on a PCB of a control board. See paragraph [0054] of the present specification.

In contrast, AAPA discloses that each of a plurality of system control chips and each of a plurality of memories are mounted on a PCB of a control board in the form of an individual package. See paragraphs [0024]-[0026] of the present specification. Since each of the system control chips and each of the frame memories are mounted on the PCB as an individual package, the control board may have a disadvantage in that signal property may deteriorate due to an inductance increase between signal lines connecting the system control chips, and that a driving module of the PDP may be fabricated in a considerably large size due to frame memories formed around system control chips.

The present specification describes mounting system control chips and frame memories on a single package, thereby I/O signal lines can be connected within the single package, and the I/O signal lines do not occupy a wide wiring area (as compared to AAPA's control board). Additionally, it may be possible to decrease the number of the I/O signal lines a considerable amount from the AAPA.

AAPA does not teach or suggest a multi-chip module in which a plurality of control chips having a control circuit for controlling the PDP, and a plurality of memories are mounted on a single package. Kumar does not teach or suggest the features of independent claim 1 missing

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from AAPA. Thus, AAPA and Kumar do not teach or suggest all the features of independent claim 1. Independent claim 1 therefore defines patentable subject matter.

Independent claim 4 recites a control board provided with a multi-chip module in which a plurality of control chips having a control circuit for controlling the PDP, and a plurality of memories are mounted on a single package, a plurality of driving units for generating and applying a driving signal corresponding to a control signal generated from the control board, and a PDP for displaying an image by a plasma discharge according to the driving signal applied from each of the plurality of driving units. Independent claim 4 also recites that the multi-chip module is mounted on a printed circuit board (PCB), and input/output (I/O) lines connecting the plurality of control chips and the plurality of memories are not formed directly on the PCB but are formed within the single package.

For at least similar reasons as set forth above, AAPA and Kumar do not teach or suggest all the features of independent claim 4. More specifically, AAPA and Kumar do not teach or suggest a multi-chip module in which a plurality of control chips having a control circuit for controlling the PDP, and a plurality of memories are mounted on a single package. Independent claim 4 therefore defines patentable subject matter.

Independent claim 13 recites a control board having a circuit board and a multi-chip module on the circuit board, the multi-chip module including a plurality of control chips and a plurality of memories on a single package, the control chip including a control circuit to control a PDP. Independent claim 13 also recites the multi-chip module includes a circuit package having a plurality of circuit layers, and wherein at least one of the plurality of control chips and

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at least one of the plurality of memories are formed on a front of the circuit package and input/output (I/O) lines are formed through the plurality of circuit layers, and the I/O lines connect the at least one control chip and the at least one memory within the single package.

For at least similar reasons as set forth above, AAPA and Kumar do not teach or suggest at least these features of independent claim 13. More specifically, AAPA and Kumar do not teach or suggest a multi-chip module including a plurality of control chips and a plurality of memories on a single package. Thus, independent claim 13 defines patentable subject matter.

For at least the reasons set forth above, each of independent claims 1, 4 and 13 defines patentable subject matter. Each of the dependent claims depends from one of the independent claims and therefore defines patentable subject matter at least for this reason. In addition, the dependent claims recite features that further and independently distinguish over the applied references.

CONCLUSION

In view of the foregoing, it is respectfully submitted that the application is in condition for allowance. Favorable consideration and prompt allowance of claims 1-7 and 13-18 are earnestly solicited. If the Examiner believes that any additional changes would place the application in better condition for allowance, the Examiner is invited to contact the undersigned attorney at the telephone number listed below.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this,

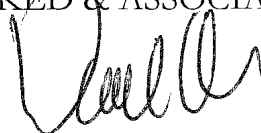
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concurrent and future replies, including extension of time fees, to Deposit Account 16-0607 and please credit any excess fees to such deposit account.

Respectfully submitted,
KED & ASSOCIATES, LLP



David C. Oren
Registration No. 38,694

P.O. Box 221200
Chantilly, Virginia 20153-1200
(703) 766-3777 DCO/kah

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Please direct all correspondence to Customer Number 34610